

OBSERVATIONS

ON THE

TABLE of ASSIZE.

BY A

JOURNEYMAN BAKER.

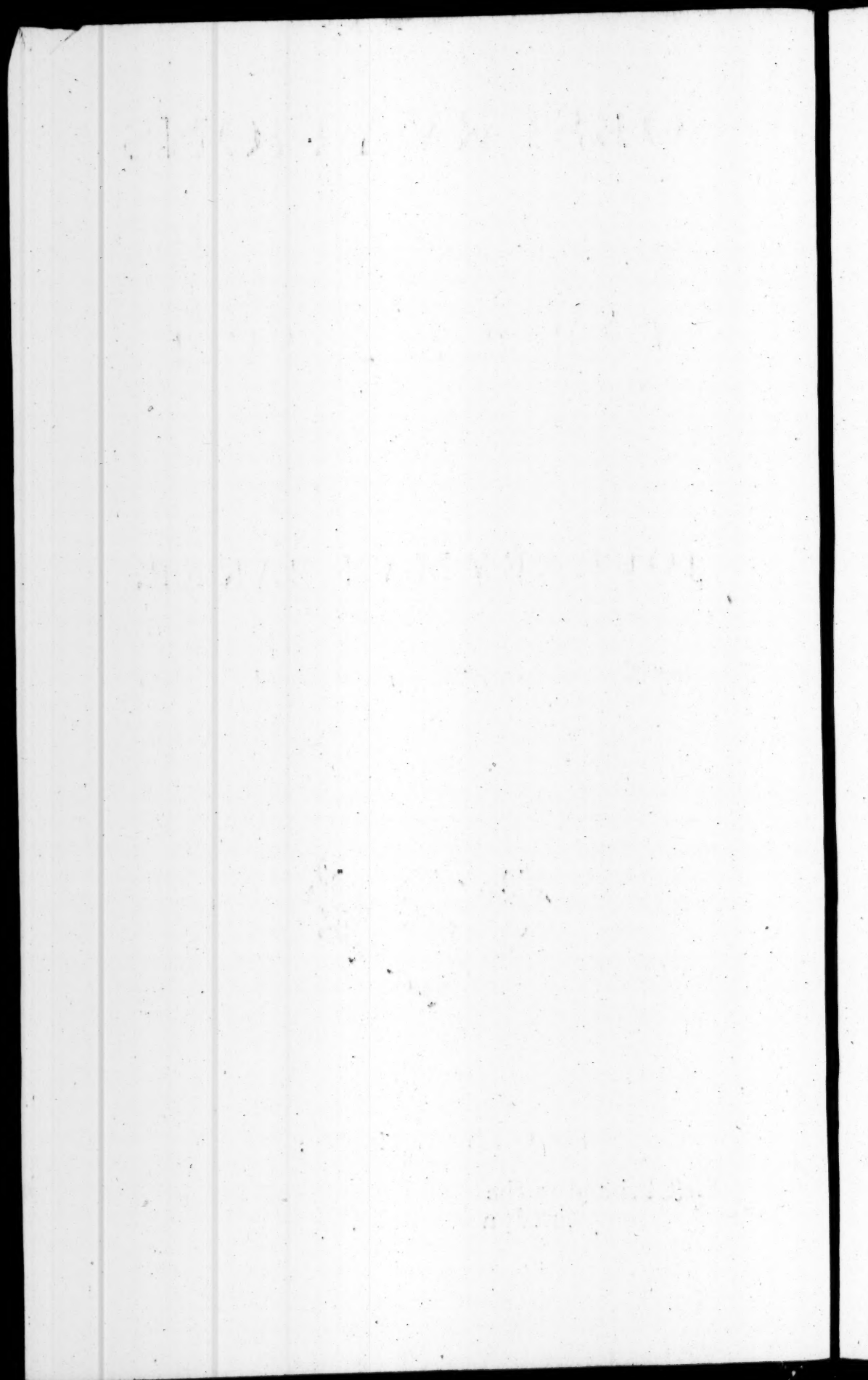
*Thou shalt not fetter thy Servant when he kneadeth
the Dough.*

ANON.



D U B L I N :

First Printed in the YEAR 1753, and now re-
printed in the YEAR 1765.



OBSERVATIONS, &c.

THE Principle, on which the Table of Assize is made, is, That a given Quantity of Corn, for Instance, a Quarter, or 40 Stone, shall, when made into Bread, bring as much Money to the Baker, as shall repay him the original Price of the Corn, and also give him such a Profit as is reasonable, to defray his Expences in making the Corn into Bread, and for his Maintenance.

The Sum, which is now allowed to the Baker for Expences and Profit on the Quarter, or 40 Stone of Wheat, when made into Household Bread, is 9 Shillings. †

The present Table of Assize supposes that 40 Stone of Wheat of the middle Price, when made into merchantable Household Bread, will produce 30 Stone 10 Pounds, or 556 futtle Pounds of such Bread, and neither more nor less.

In order to lay before the Reader the Reasonableness of the Supposition, on which the Table is founded, it will be proper, shortly to mention the Process of making Bread.

The Quarter of Wheat, by Law, must weigh 40 Stone, or 560 futtle Pounds. When this is ground into Meal, the Miller takes thereout for Toll two Stone, or 28 Pounds; so that the Baker receives from the Mill, no more than 532 futtle Pounds of Meal: Out of these 532 Pounds of Meal, when the whole is to be made into Household Bread, the Bran is also to be taken. By authentic Experiments, the Bran, which such a Quarter of Wheat will throw off, amounts

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† 9 Shillings was the allowance in the year 1753 when these Observations were first published, but is now 11 Shillings.

to 8 Stone 3 Pounds, or 115 futtle Pounds, which being deducted, out of 532 Pounds of gross Meal, leaves 417 Pounds of net Meal, fit to make merchantable Household Bread.

By the Baker's Letter, lately published, it is admitted, and by authentic Experiments it is proved, that in order to make Dough of any Quantity of such net Meal, it is requisite to add ONE Half of its own Weight of Water, Barm, and Salt; so that the Water, Barm, and Salt, make ONE third Part of the Composition of the Dough, before it is put into the Oven. Then, according to this Rule, the 417 Pounds of net Meal, which the Baker has after separating the Bran, by the Addition of one Half of its Weight, of Water, Barm, and Salt, that is $208\frac{1}{2}$ futtle Pounds, will become $625\frac{1}{2}$ futtle Pounds of raw, or unbaked Dough.

It is also proved by Experiments, that when Dough, by Baking, has lost ONE tenth Part of the Weight which went into the Oven, then the Bread is sufficiently baked. But I will suppose it to lose one ninth, then, according to this Rule, subtracting from the $625\frac{1}{2}$ Pounds, (the Weight of the raw Dough) ONE ninth Part of that Weight, *viz.* $69\frac{1}{2}$ it leaves in merchantable Household Bread exactly 556 futtle Pounds, the precise Quantity, which the Table of Assize supposes the Quarter, or 40 Stone of Wheat to produce. From this I think it clearly appears, that the present Table of Assize is founded in the strictest Justice, and that with respect to the Household Bread, it ought not to undergo any Alteration.

The Table of Assize is so contrived, that these 556 Pounds of Bread shall be divided into, so many Loaves, as shall produce the Money which the Quarter of Wheat cost, and also the nine additional Shillings allowed the Baker. That is, when

when the Quarter of Wheat, with the Allowance, amounts to 40 Shillings, the above 556 Pounds of Bread are divided into 40 Loaves, at 12 Pence each; if the Quarter and Allowance amount to 50 or 60 Shillings, then the same Weight of Bread is divided into 50 or 60 Loaves, at 12 Pence each; by which it clearly appears, how the same Weight of Bread, (however subdivided) is made to repay the Baker, let the Price of the Wheat be what it may. And from what has been said, it also appears, that whatever the Bran of such a Quarter of Wheat may be worth, it is an additional Profit to the Baker, over and above the legal Allowance, as it is evident that the Bran is not brought into the Account.

The Reason of being so particular in describing the Method of making Meal into Bread, was in order to explain by what means the Deduction of Bran, and the Toll, are again made up to the Baker, by the wetting, (as it is called) the Table, in reality, being grounded on the Quantity of Bread the Quarter of Wheat will produce, and not upon the absolute Weight of the Quarter of Wheat. The Use of considering it in this Light will be still more evident, when I come to make Observations on the Wheaten and White Assize.

From hence it is fully shewn, what Principle the Legislature proceeded upon in determining the Assize of Household Bread; but, perhaps it is not so easy to shew, upon what Principle they proceeded in determining the Assize for the Wheaten and White Bread. However, I shall offer what occurs to me as a Solution of this Matter, and submit to the Judgment of the candid Reader.

Before I proceed to offer any Observations on the Assize of the Wheaten and White Bread, I must put the Reader in Mind, that the gross Meal, as it comes from the Mill, is capable of being separated into three different Kinds of Flour, or Meal, besides the Bran.

The last Session of Parliament, when the Case of the Bakers was enquired into by the House of Commons, I was present, and could not but observe, that the Bakers who were examined, appeared industriously to confound the Names, *Meal* and *Flour*, the Reason of which will be obvious from what follows. And therefore, I must caution the Reader to observe, that such Part of the gross Meal which comes from the Mill, as is separated by Boulting, and is fit to make White Bread, I call *Flour*; and such Part thereof as is separated in like Manner, and is fit to make Wheaten Bread, I call *fine Meal*; and the Remainder of the gross Meal from the Mill, after separating the Bran, I call simply, *Meal*, which, from known Experience, is fit to make Household Bread. These Distinctions must be carefully attended to, in order to avoid Confusion, or Obscurity, as much as may be, in what follows.

From any Information I have been able to come at, it does not appear, that the Legislature ever ascertained any particular Weight of fine Meal or Flour, out of which the Baker should be obliged to make any particular Quantity of Wheaten or White bread, but seem to have had no Quantity of Corn, Meal, or Flour, in their Contemplation, distinct from the Quarter of Wheat; for which Reason, the Assize Table, as far as relates to the Wheaten and White Bread, has been wrong from the beginning to this Day, as will just now appear. For,
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the Want of ascertaining the precise Weight of fine Meal or Flour, which should be truly proportional to the Quantity of Meal produced from a Quarter of Wheat, and employed in making the Assize Quantity of Household Bread, has been the true Cause of all the Frauds and Abuses committed by the Bakers, and is to them a Fund of Profit, much above what the Law supposes, or intends them to receive.

The Table of Assize appoints, that the Weight of the Wheaten Loaf shall be three fourths, and the Weight of the White Loaf one Half, of the Weight of the Household Loaf, but does not name any particular Weight of fine Meal, or Flour, out of which so many Wheaten or White Loaves shall be made, as will produce the Price of the Quarter of Wheat, and Allowance thereon, as it does in the Case of the Household Bread; from whence I take the Liberty to conjecture, that the Legislature proceeded upon a Supposition, that the Quarter of Wheat would not produce of fine Meal more than such a Quantity, as when made into Wheaten Bread would weigh three fourths of the Weight of the Household Bread, which the Quarter of Wheat would produce, and therefore assized the Wheaten Loaf at three fourths of the Household And in like Manner, in Respect to the White, they proceeded upon the like Supposition, that the Quarter of Wheat would produce no more Flour than such a Quantity, as, when made into White Bread, would weigh Half the Weight of the Household Bread, and therefore assized the White Loaf at Half the Weight of the Household Loaf. It is therefore very worthy of Observation, that the Legislature, proceeding in this Manner, did entirely neglect the Value of whatever Meal should remain of the
Quarter

Quarter of Wheat, after taking thereof the fine Meal, or Flour, for the Wheaten or White Bread, as the Case should be.

Whether the Legislature proceeded upon this Principle, I will not presume to say positively ; but it is incontestably true, that, as the Law of Assize stands at present, the Baker does not account with the Public, IN ANY MANNER, for one Penny of the Value of all the Meal which remains, after taking the Wheaten Meal and Flour out of the Quarter of Wheat, which is supposed by the Table, to be made into Wheaten and White Bread. It appears to me, that if the Baker had been compelled by Law properly to account with the Public for the Redundance of the Meal, which will remain after the taking thereof the fine Meal for Wheaten, or the Flour for White Bread, then the Public would get from the Baker the whole Produce of the Quarter of Wheat, which they ought to get, and the Baker would receive the Reward for his Labour, which the Law intends him, and no more ; but for want of regulating this Matter so, that the Baker shall account with the Public for the whole produce of the Quarter of Wheat, when said to be baked into Wheaten or White Bread, as he does when the Quarter of Wheat is baked into Household Bread, I say, for want of such a Regulation, whatever Meal or Flour the Quarter of Wheat produces, more than is sufficient to make the Assize Quantity of either Wheaten or White Bread, is a clear Profit in the Baker's Pocket, over and above what the Law supposes him to get.

It appears from what is said above, of the Process of making the Household Bread, that 556 Pounds weight of Household Bread will, in
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all Cases, repay the Baker the original Price of the Quarter of Wheat, and 9 Shillings which is allowed him for Expence and Profit. And, from considering the Construction of the Table of Assize, it will appear, that three fourths of that Weight, or 417 Pounds of Wheaten Bread, will, in like Manner, repay the Baker the full Price of the Quarter of Wheat, together with 8 Shillings, which is allowed him for Profit on this Kind of Bread. And lastly, from the same Table it appears, that Half the Weight of the Household, or 278 Pounds of White Bread, will produce to the Baker the original Price of the Quarter of Wheat, with the like Allowance of 8 Shillings.

It has been already shewn, that the principal Ingredient in the Composition of Household Bread, is the whole Meal, which can be obtained from a Quarter of Wheat, of the middle Price, after separating the Bran; and that this Quantity of Meal, when made into Dough by the addition of Water, Barm, and Salt, weighs 625 $\frac{1}{2}$ Pounds, of which one third Part is Water, Barm, and Salt, and two thirds Meal. From hence we are furnished with an easy and obvious Rule, whereby we can ascertain the precise Weight both of the fine Meal, and the Flour, which enter the Composition of Wheaten and White Bread. For as the three Sorts of Bread in the Assize Table, are compounded in the same Proportions, differing only in the fineness of the Meal; so if we take three Fourths of the Weight of the Household Dough, viz. 469 Pounds, it will be exactly equal to the Weight of Wheaten Dough, which, when baked, will produce rather more than the exact weight of Wheaten Bread required by the Table of Assize. Then, as we know from the Composition of Bread,

Bread, that one third Part thereof, before it is baked, is Water, Barm, and Salt, so, if we subtract one third Part of the last mentioned weight of Dough, from itself, we shall have the precise Weight of the fine Meal, which enters the Composition of Wheaten Bread. For Example, one third of 469 Pounds, is 156 Pounds and one third of a Pound, which being subtracted from 469 Pounds, leaves 312 suttle Pounds and three fourths of a Pound, for the precise Weight of the fine Meal, which will make as many Wheaten Loaves, as will repay the Baker the whole Price of the Quarter of Wheat, with the Allowance.

By the like Method of proceeding, we shall discover the precise Weight of Flour which enters the Composition of the Quantity of White Bread, required by the Table of Assize to be made out of the Quarter of Wheat. Thus, as the Table of Assize requires the White 12d. Loaf to weigh but half the Weight of the Household Loaf, we must therefore take half the Weight of the Household Dough, viz. 312 $\frac{3}{4}$ suttle Pounds, which will be the Weight of the White Dough, sufficient to make as many white Loaves, as will produce to the Baker the Price of the Quarter of Wheat, with the proper Allowance; then, the Composition here being in like Proportion with the other Sorts, by subtracting one third Part of the Weight of the Dough, for the Water, Barm, and Salt, that is, 104 Pounds, and one fourth of one Pound, taken from 312 $\frac{3}{4}$ Pounds, we shall have left 208 Pounds, and an half, for the Weight of the Flour, which will make as much White Bread, as will sell for the whole Price of the Quarter of Wheat, and the Allowance.

Having

Having thus shewn the real Weight of the different Kinds of Meal and Flour, which are expended in making as many Loaves of the different Kinds of Bread, as the Law requires the Baker to make out of a Quarter of Wheat, we are now able to consider the REASONABLENESS OF THE BAKER'S DEMAND, *viz* That the Legislature should establish the Weight of three hundred and an half of Flour, that is, 392 suttle Pounds, as equivalent to the Quarter of Wheat.

If the Reader looks back a few Lines, he will see that no more than 208 $\frac{1}{2}$ suttle Pounds, are the real Equivalent to the Quarter of Wheat, in as much as that Weight of Flour, made into White Bread, will produce the same Sum of Money exactly, as the whole Quarter of Wheat will produce, when made into Household Bread.

From these Observations we are led to see clearly what is the real Equivalent in Flour, for the Quarter of Wheat; a Question, which the Bakers, with equal Industry and Profit, have ever endeavoured to conceal.

The Weight of Meal produced from the Quarter of Wheat, separating only the Bran, is 417 suttle Pounds. And hence the Weight of the Meal, which is produced from a Quarter of Wheat, and which remains to the Baker, after separating as much fine Meal as makes the Assize Quantity of Wheaten Bread, will be 104 $\frac{1}{2}$ Pounds, and the Weight of the Quarter of Meal, if I may use that Expression, which will remain to the Baker, after separating as much Flour as will make the Assize Quantity of White Bread, will be 208 $\frac{1}{2}$ suttle Pounds; which two Remainders are never accounted for to the Publick, but are clear Profit in the Baker's Pocket, over and above what the Law supposes him to get.

There are Experiments of undeniable Credit, which

which prove that these Remainders may be manufactured into merchantable Household Bread, and if the Remainder of a Quarter of White, be mixed with the Remainder of a Quarter of Wheaten Bread, according to the Rules before laid down, the two Remainders, weighing 312½ futtle Pounds, when manufactured into merchantable Household Bread, will weigh 417 Pounds; which, when the Price of the Quarter of Wheat and Allowance is 40 s. will produce 30 Loaves, or as many Shillings to the Baker, that is 15 s. on the Quarter of Wheat which is said to be made into Wheaten and White Bread, on an Average, more Profit than the Law allows him. If he bakes the Remainders of two Quarters of Wheat, of which White Bread is said to be made, they will weigh in Meal 417 Pounds, and in Household Bread will produce 40 s. when the Quarter of Wheat and Allowance is 40 s. and in Proportion at any other Assize; whence the Baker gets on the Quarter of Wheat, said to be baked into White Bread, 20 s. more than he is supposed to get by Law. If he bakes into Household Bread the Remainders of two Quarters of Wheaten Bread, he will get considerably but not so much as in either of the last Cases.

This is so great a Præmium, even under the Law, to induce the Baker to buy Wheat when he is to make Wheaten or White Bread, rather than Flour, that this Circumstance alone is sufficient to demonstrate, that the Baker has still some greater Profit than what is here shewn, which determines him to buy Flour at all. For it is impossible to believe the Baker would buy Flour, if he did not make at least as much Profit by it, as he demonstrably can by Wheat, when manufactured into Wheaten and White Bread.

The Reader is, I hope, by this Time fully informed

Informed of the Means to judge impartially between *the Baker's Letter* and *the Considerations published by a Citizen*.

The Baker, in his 13th Page, is pleased to think, he has caught the *Author of the Considerations* in a Dilemma, and proceeds some Pages to shew it; but the Author of the *Considerations* asserts no more, than that the Baker gets as much, or more, by 300 Weight, or 336 Pounds of FLOUR, made into White and Wheaten Bread, as he does by a Quarter of Wheat made into Household, and the Author is indisputably in the Right. The Fallacy of the Baker is, in using the Words FLOUR and BREAD in an ambiguous Sense, and treating the Matter so, as that the Reader is led to think, that the *whole* Produce of the Quarter of Wheat is capable of being made into *Wheaten and White* Bread, and the *Flour alone* into *Household*, neither of which are true. And, I think, I have proved that no more than 312 futtle Pounds and three fourths of a Pound of fine Meal, are requisite to make the Assize Quantity of Wheaten Bread, and therefore *that Weight of fine Meal* is the true Equivalent to the Quarter of Wheat in Household Bread, as it will produce the same Sum when made into Wheaten Bread. And also; that 208 $\frac{1}{2}$ futtle Pounds of Flour will make the Assize Quantity of White Bread, and therefore *that Weight of Flour* is the true Equivalent to the Quarter of Wheat in Household Bread, as it will produce to the Baker the same Sum when made into White Bread. *Both which make it evident, and establish this Truth*, that the *Author of the Considerations* is right in what he asserts concerning 300 Weight, or 336 futtle Pounds of Flour, and that the *Baker* either mistakes this Matter, or means to mislead the Publick.

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The Baker says, that great Weight has been laid upon the *Calculation*, quoted in his 12th and 13th Pages; and indeed so there ought, for, the real Merits of the Question about the true Measure of Flour, which ought to be established as the Equivalent of the Quarter of Wheat, must turn upon that or a like Experiment, and therefore the Baker has employed his whole Strength to put it into such a Light, as shall induce the Reader to believe that the true Equivalent in Flour, to the Quarter of Wheat, is no less than three hundred and an half, that is 392 suttle Pounds, altho it is manifest from what I have said, that three hundred and an half in the White Bread, is 182 $\frac{1}{2}$ suttle Pounds, and in the Wheaten Bread, 79 suttle Pounds, more than the Equivalent of the Quarter of Wheat in the Household.

It follows, from the Matters mentioned in this Paper, that the true Equivalent of the Quarter of Wheat in Flour, is equal to 208 $\frac{1}{2}$ suttle Pounds, and in Wheaten or fine Meal, equal to 312 like Pounds, and the three fourths of a Pound, and not three hundred and an half, as the Baker would insinuate,

Although the Baker, in examining the Citizen's Experiment*, admits that one third of the Composition of Bread, MAY be Water, Parm, and Salt, yet he has added a Note at the Bottom of Page 13, where he intimates, that our Flour made of middle priced Wheat, will not bear so much

* The Baker objects against this Experiment, as not made of middle priced Wheat: The middle Price that Week, was 1l. 11s and the Bread in the Experiment was assized at that Rate, though the Price of the Corn, used in the Experiment was under it, wherefore there is no Foundation for his Objection.

much wetting. Possibly there may be some Flour made of middle priced damp Wheat, which will not bear so much wetting : But it is as true, that the Baker, who must be supposed to be skilled in the buying of Wheat, can at all Times distinguish, upon the examination of the Wheat, whether it be damp or dry, thick or thin in the Rind, and every other Quality, which can tend to diminish its Produce in Bread ; and therefore, it is not to be imagined, but that he will guard himself against any Loss in these Particulars, by the Price he pays ; and there is no Necessity to provide by Law, for accidental Differences of Things, when the Judgment of the Buyer is sufficient to defend him, from any thing he can be subject to lose, on that Account.

When I determined to put on Paper what occurred to me upon this Matter, I had no Intention to have taken any Notice of the *Baker's Letter*, having no Design to enter into a Controversy with any Person about this Business ; but in the Progress of the Observations, the Equivalent in Flour to the Quarter of Wheat, coming out so very different from the Baker's Account, and being the PRINCIPAL POINT IN THE WHOLE MATTER, I could not pass that Part of his *Letter* by, without stating it as it appears to me ; and therefore I shall not make farther Observations on his *Letter*, though whatever else is material in it, I think, can be very fully and fairly answered.

My Intention in writing these Observations was to put the Table of Allize in a clear Light, as it appeared to me to be the ONLY MEANS, whereby we can establish what is the true Measure of the FLOUR and FINE MEAL, which are EQUIVALENT TO THE QUARTER OF WHEAT ;
and

and it is clear to me, that the same Measure will not answer both. The true Measure for Flour made into White Bread, being 14 Stone 12½ Pounds, or one hundred three quarters, twelve and a half Pounds. And the true Measure for fine Meal made into Wheaten Bread, being 22 Stone, 4 and ½ Pounds, or two hundred three quarters, four Pounds and an half. But, I think the Equivalent in Flour, to the Quarter of Wheat, ought to be rated according to the *White* Bread, at 208 futtle Pounds, or thereabouts, for if it should be rated at any considerably higher Quantity, or according to the Wheaten Bread, what such higher Quantity shall exceed the said Weight of 208½ futtle Pounds, will for ever remain as a Præmium to the Baker, unaccounted for to the Public. And there can be no Hardship upon the Baker by rating it according to the White, for he will then only be obliged to make his Wheaten Bread out of *Corn*, and not out of *Flour*, which, to avoid his imposing on the Publick, he ought to be obliged to do.

Upon the whole, it appears to me, that the Baker has all the Profit that the Law intends him, on the Household Bread, and vastly more on the Wheaten and White; and therefore, if there be any Alteration made in the Assize, it ought to be only in the Wheaten and White, by reducing his Profit thereon. If I have succeeded in stating this Matter, so as to be intelligible to the Reader, I shall think myself fully recompensed for any Trouble it hath given,

A JOURNEYMAN BAKER.

F I N I S.